

## **AMENDMENTS TO THE CLAIMS**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1. (Previously Presented) A radiological image pickup apparatus comprising:  
a radiation detection section including an active matrix substrate, a radiation-sensitive semiconductor formed on the active matrix substrate, and a voltage application electrode formed on the radiation-sensitive semiconductor, the active matrix substrate including a charge-storage capacitor, a charge read switching element, and a pixel electrode for each unit cell with signal lines and scanning lines disposed like a lattice on the substrate; and

a cabinet for retaining said radiation detection section therein,  
wherein at least a portion just above the voltage application electrode is formed of a nonconductive material in a surface lid section of said cabinet opposed to the voltage application electrode.

2. (Previously Presented) The radiological image pickup apparatus as claimed in claim 1, wherein any portion, other than the nonconductive material portion in said cabinet, is formed of a conductive material.

3. (Previously Presented) The radiological image pickup apparatus as

claimed in claim 1, wherein the surface lid section of said cabinet is entirely formed of a nonconductive material.

4. (Previously Presented) The radiological image pickup apparatus as claimed in claim 3, wherein any portion, other than the nonconductive material portion in said cabinet, is formed of a conductive material.

5. (Previously Presented) The radiological image pickup apparatus as claimed in claim 1, wherein the radiation-sensitive semiconductor and the voltage application electrode on the active matrix substrate are molded by using an insulating substance so as to entirely cover the radiation-sensitive semiconductor and the voltage application electrode with the insulating substance, and wherein a shield member made of a conductive material is formed so as to cover any area, other than the portion just above the voltage application electrode, from a side wall of said cabinet to a margin of the voltage application electrode.

6. (Original) The radiological image pickup apparatus as claimed in claim 5, wherein the shield member is electrically connected to a portion formed of a conductive material in an extension of said cabinet.

7. (Original) The radiological image pickup apparatus as claimed in claim 6, wherein charge detection amplifiers and a gate driver connected to ends of the signal lines and the scanning lines on the active matrix substrate are formed on the active matrix substrate and molded by using the insulating substance.

8. (Currently Amended) The radiological image pickup apparatus as claimed in claim 6, wherein the shield member is formed of a material selected from the group consisting of:

materials made of metal with an atom number in the range of 40 to 90; and,  
~~materials whose part is the metal.~~

9. (Previously Presented) The radiological image pickup apparatus as claimed in claim 2, wherein the radiation-sensitive semiconductor and the voltage application electrode on the active matrix substrate are molded by using an insulating substance so as to entirely cover the radiation-sensitive semiconductor and the voltage application electrode with the insulating substance, and wherein

a shield member made of a conductive material is formed so as to cover any area, other than the portion just above the voltage application electrode, from a side wall of said cabinet to a margin of the voltage application electrode.

10. (Previously Presented) The radiological image pickup apparatus as claimed in claim 9, wherein the shield member is electrically connected to a portion formed of a conductive material in an extension of said cabinet.

11. (Currently Amended) The radiological image pickup apparatus as claimed in claim ~~7~~10, wherein charge detection amplifiers and a gate driver connected to ends of the signal lines and the scanning lines on the active matrix substrate are formed on the active matrix substrate and molded by using the

insulating substance.

12. (Currently Amended) The radiological image pickup apparatus as claimed in claim 10, wherein the shield member is formed of a material selected from the group consisting of:

materials made of metal with an atom number in the range of 40 to 90; and,  
~~materials whose part is the metal.~~

13. (Previously Presented) The radiological image pickup apparatus as claimed in claim 3, wherein the radiation-sensitive semiconductor and the voltage application electrode on the active matrix substrate are molded by using an insulating substance so as to entirely cover the radiation-sensitive semiconductor and the voltage application electrode with the insulating substance, and wherein

a shield member made of a conductive material is formed so as to cover any area, other than the portion just above the voltage application electrode, from a side wall of said cabinet to a margin of the voltage application electrode.

14. (Previously Presented) The radiological image pickup apparatus as claimed in claim 13, wherein the shield member is electrically connected to a portion formed of a conductive material in an extension of said cabinet.

15. (Previously Presented) The radiological image pickup apparatus as claimed in claim 14, wherein charge detection amplifiers and a gate driver connected to ends of the signal lines and the scanning lines on the active matrix substrate are

formed on the active matrix substrate and molded by using the insulating substance.

16. (Currently Amended) The radiological image pickup apparatus as claimed in claim 14, wherein the shield member is formed of a material selected from the group consisting of:

materials made of metal with an atom number in the range of 40 to 90; ~~and,~~  
~~materials whose part is the metal.~~

17. (Previously Presented) The radiological image pickup apparatus as claimed in claim 4, wherein the radiation-sensitive semiconductor and the voltage application electrode on the active matrix substrate are molded by using an insulating substance so as to entirely cover the radiation-sensitive semiconductor and the voltage application electrode with the insulating substance, and wherein

a shield member made of a conductive material is formed so as to cover any area, other than the portion just above the voltage application electrode, from a side wall of said cabinet to a margin of the voltage application electrode.

18. (Previously Presented) The radiological image pickup apparatus as claimed in claim 17, wherein the shield member is electrically connected to a portion formed of a conductive material in an extension of said cabinet.

19. (Previously Presented) The radiological image pickup apparatus as claimed in claim 18, wherein charge detection amplifiers and a gate driver connected to ends of the signal lines and the scanning lines on the active matrix substrate are

formed on the active matrix substrate and molded by using the insulating substance.

20. (Currently Amended) The radiological image pickup apparatus as claimed in claim 19, wherein the shield member is formed of a material selected from the group consisting of:

materials made of metal with an atom number in the range of 40 to 90; and,  
~~materials whose part is the metal.~~